# NEW AND LITTLE-KNOWN LEPIDOPTERA OF THE PHILIPPINE ISLANDS.

By W. Schultze.

(From the Entomological Section, Biological Laboratory, Bureau of Science, Manila, P. I.)

# RHOPHALOCERA.

# NYMPHALIDÆ.

ELYMNIINÆ.

ELYMNIAS, Hübn., Verz. bek. Schmetterl. (1816), 37.

Elymnias palmifolia sp. nov. (Pl. I, fig. 1).

3, fore wing, dark brown with a decided blue iridescence. A large, subapical, white spot, divided into 3 parts by the veins. An elongated streak between first and second median veins, slight traces of two other elongated submarginal streaks. Hind wing; pale brown near costal and inner margins, darker towards the outer margin. Between the veins, 7 yellowish-white stripes, of which there are 2 between median veins I and II. These stripes run nearly to the base of the wing where they suffuse with the general color, but they are very pronounced towards the margin. Near the outer margin, slight traces of light, wavy spots, shining through from the under side. Marginal series of interrupted, crescent-shaped, white spots in pairs between veins and confluent with cilia. Under side of wings lighter; spots corresponding as to position, but differing in size from those above. Posterior to the subapical spot, a very small white one, the streak between median veins, I and II larger than above. Between submedian and first median veins, a broad, whitish streak having a darker one through its middle and showing traces above. On the hind wing the stripes are shorter than above. On the marginal area many irregular, transverse, wavy spots.

Length of wing,  $\delta$ : 39 millimeters.

Length of wing, ♀: unknown.

Tuguegarao, Cagayan, P. I.

Time of capture: July, 1905. (Warren Williamson, collector.)

Type &, No. 4604, in Entomological Collection, Bureau of Science, Manila, P. I.  $$^{27}$$ 

This species is very closely related to *Elymnias malis*, described by Semper, but as he says "The observation that neither the presence nor the size of a spot, but the arrangement of the individual spots, if present, is very constant in the different species of the genera Elymnias," I feel safe in describing this species as new.

# HETEROCERA.

#### SESIIDÆ.

ADIXOA, Hamps., Fauna of Br. Ind. Moths (1892), 1, 198.

Adixoa tomentosa sp. nov. (Pl. I, figs. 2a male, 2b female, 2c 2d, cocoons with pupal skin.)

2, head dark, violet-brown, front steel-blue, white at the sides; palpi white, sides blackish. Collar steel-blue, bordered in front by yellow. Thorax black with a few brownish scales and a violet sheen; a yellow stripe on the inner margin of tegulæ. Metathorax yellow; abdomen bluish-violet-black, rear margins of the second, fourth and anal segments yellow, the last slightly lighter. Posterior margin of other segments gray-brown, with a few ochraceous scales. Below, on the first abdominal segment, a white triangular spot; posterior margins white. Anal tuft black, with gray and whitish hairs, below lighter. Legs below whitish. Fore-wing, dark, iridescent, violet-brown with 1 hyaline streak in the cell, 4 beyond it, and 1 below. Discocellular yellowish, below the cell towards the base also somewhat yellowish. Cilia with a few ochraceous scales. Hind-wing hyaline, outer border with the color of the fore-wing; external cilia the same, those of the inner margin lighter to white, discocellular yellowish and brown.

3, palpi yellow, blackish at the sides, front white, yellowish-brown on top. Posterior margin of second, fourth and anal segment yellowish. In the male, the anal tuft below is yellowish-white.

Length of wing,  $\delta$ : 8.5 millimeters.

Length of wing, 9:11 millimeters.

Manila, P. I.

Time of capture: June, 1905. (W. Schultze, collector.)

Type, No. 3345, in Entomological Collection, Bureau of Science, Manila, P. I.

The caterpillars live in a vine, *Paederia tomentosa* Blume, where they are easily found because of the swellings or nodules which they produce on the stems of the plant. The caterpillar makes a blackish, parchment-like cocoon compressed at both ends; from three to five cocoons are usually found together in a single nodule.

<sup>&</sup>lt;sup>1</sup> Semper, Reisen im Arch, d. Phil. Die Schmetterl, d. Phil. Inseln. (1892), 5, 63.

#### SYNTOMIDÆ.

CERYX; 2 Wllgrn. Wien. Ent. Mon. (1863), 7, 140.

Ceryx macgregori sp. nov. (Pl. I, fig. 7).

2, dark brown, antennæ white at tips, frons with a dark spot in the center. Tops and sides of head whitish. Collar with a yellow spot at the sides. Tegulæ with a yellowish spot at the base. A yellowish, median streak on pro-, meso- and metathorax. Abdomen dark brown with 4 longitudinal series of ochraceous spots on dorsum, ventrum and sides respectively; last 2 segments without spots and lighter. Fore-wing with 5 hyaline spots, a small, elongated antemedial, 2 medial and 2 post-medial, which have a bluish sheen in certain lights. The upper medial spot is in the cell and the lower postmedial one is divided by the dark vein. Hind-wing with a large hyaline spot from the base below the cell to vein IV. Legs dark brown, coxæ with yellowish spot.

Length of wing,  $\delta$ : unknown.

Length of wing, 9: 12 millimeters.

Montalban, Rizal, P. I.

Time of capture: February, 1906. (Charles S. Banks, collector.)

Type ?, No. 5189, in Entomological Collection, Bureau of Science, Manila, P. I.

I take pleasure in naming this species after Mr. R. C. McGregor, ornithologist of this Bureau, who has added a large number of insects to our collection.

EUCHROMIA, Hübner, Verz. bek. Schmetterl. (1818), 121.

Euchromia elegantissima Wllgr. Eugenies Resa omkr. Jordan (1861), 360. Var. diffusihelvola var. nov. (Pl. I, fig. 3).

Colors of body and markings of the wings as in the regular form of *elegantissima*. The general color of the fore-wing is brownish irrorated with yellowish scales, especially near the outer margin. Cilia dark brown.

Length of wing,  $\delta$ : 22.5 millimeters.

Length of wing, 9: 22.5 millimeters.

Manila, P. I.

Time of capture: December, 1903. (W. Schultze, collector.)

Types & and \( \forall \), No. 448, in Entomological Collection, Bureau of Science, Manila, P. I.

# ARBELIDÆ.

# SQUAMICAPILLA gen. nov.

Proboscis absent; palpi very minute and porrect; antennæ of the male short, bipectinated to the tips; legs covered with long hairs, which at the tips are scale-like and on the tibiæ of the fore and hind legs very prominent. Male with a long anal tuft of hair scales.

Type: S. arenata.

<sup>2</sup> Hampson: Cat. Lept. Phalaenae, (1898), 1, 40 (Syntomoides).

In the classification I place this new genus after the following: Arbela,<sup>3</sup> Moore, P. Z. S. (1879), 411.

# Squamicapilla arenata sp. nov. (Pl. I, fig. 4.)

of, palpi pale brownish; head white; collar in front whitish, at the sides dark brown. Thorax; posterior margin of tegulæ tufted with dark brown hair-scales, as is also the metathorax. Abdomen whitish; tuft of brown scales above the first segment; at the sides of the abdomen tufts of pale, yellowish hairs, the last segments (irrorated) with a few brown scales. Anal tuft very long, with its hair scales ochraceous white, but dark brown at the tips. Fore-wing pale ochraceous white, irrorated with a few brownish scales; traces of an antemedial band. At the base of the wing, below the cell, an irregular, dark brown spot and behind the cell another large, brown, trapezoidal one, sharply pronounced. Cilia with an interrupted line of brownish scales. The large scales of the fore-wing are very roughly arranged, giving the wing the appearance of being sprinkled with sand. Hind-wing white; inner margin with white hairs. Cilia broad, with traces of darker scales, as on fore-wing. Under side of the wings whitish.

Length of wing, ♂: 17 millimeters.

Length of wing, ♀: unknown.

Manila, P. I.

Time of capture: May, 1905. (Charles S. Banks, collector.)

Type, &, No. 2812, in Entomological Collection, Bureau of Science, Manila, P. I.

#### ARCTHDÆ.

#### ARCTIINÆ.

PERICALLIA, Hübn., Verz. bek. Schmetterl. (1827), 182.

# Pericallia integra Wlk. (Pl. I, fig. 5.)

\$\foatgap\$, head, collar and thorax brownish-black; vertex of head yellowish-white, on top of head a dark brown spot, sides of collar and tegulæ yellowish-white. Abdomen orange above, with a blackish band on each segment, except the 2 posterior, which are black with an orange spot at the sides; abdomen below, dark brown. Fore-wing dark brown, a yellow-white band from base and below the cell nearly straight to vein II, then oblique to apex. Hind-wing orange, costal and outer margin at the apex dark brown, conjoined at middle and at the apex to larger spots; two dark brown spots at the posterior margin between veins I and IV; cilia brown, except an inner margin.

Length of wing,  $\mathfrak{P}$ : 20 millimeters. Length of wing,  $\mathfrak{F}$ : 15 millimeters.

<sup>&</sup>lt;sup>3</sup> Hampson: Fauna of Br. Ind., Moths. (1892), 1, 315.

Quingan, Nueva Vizcaya, P. I.

Time of capture: April, 1905. (Warren Williamson, collector.)

Type ?, No. 3986, in Entomological Collection, Bureau of Science, Manila, P. I.

The male of this species is well known and Hampson<sup>4</sup> gives a good description of it as does also Semper.<sup>5</sup> Only the female is new.

#### LITHOSIINÆ.

DEILEMERA, Hübn. Verz. bek. Schmetterl. (1818), 178.

Deilemera browni sp. nov. (Pl. I, fig. 6.)

2, palpi yellowish-white, third joint brown, second brown at the sides only. Head, thorax and abdomen light yellowish, the latter slightly darker. Head with black spots on front and vertex; 2 black spots on the collar, 4 on the tegulæ and 3 on the thorax. Abdomen above with black segmental bands, laterally with 2 rows of black spots. Fore-wing creamy white. A brown, elongated, triangular area extending from the base along three-fifths of the costa. Another brown area from the base along the inner margin to the lower angle then bending upward, not quite reaching the lower angle of the cell, running along the same and bending at vein II downward towards the base, but meeting vein I shortly before the base. Outer area brown, with its inner edges dentate between the veins. The white, inner area forms roughly the letter T. Hind-wing white, with a brown streak along the costa and a very irregular band along the margins except the base of the inner margin. Below, along the inner margin from the base, a small, brownish streak.

Length of wing, 9: 25.5 millimeters.

Length of wing,  $\delta$ : unknown.

Manila, P. I.

Time of capture: ? (Rev. Robert Brown, S. J., collector.)

Type loaned, as No. 219 (Brown Collection), to the Entomological Collection, Bureau of Science, Manila, P. I.

I take pleasure in naming this species in honor of its collector, Rev. Robert Brown, S. J.

# NOCTUIDÆ.

#### QUADRIFINÆ.

POLYDESMA, Boised Faun. Ent. Madag., Lep. (1833), 108.

Polydesma opala Pagents. Die Lep. Fauna des Bism. Archipels, (1900), 99.

\$\varphi\$, palpi grayish-white with a dark brown streak at the sides and a spot on the last joint. Head, thorax and abdomen grayish-white; a few darker scales in the middle of thorax; anal tuft reddish-brown. Fore and midtarsi and hind tibiæ and tarsi with dark brown spots. Fore-wing; basal

<sup>&</sup>lt;sup>4</sup> Hampson: Cat. of the Lept. Phal. (1901), 3, 359.

<sup>&</sup>lt;sup>5</sup> Semper, Reisen auf den Phil., Die Schm. d. Phil. Inseln (1892), 6, 486.

area grayish-white, reaching at the inner margin from the base to lower outer angle, then from the angle an oblique irregular line to the middle of costa. A large, irregular triangular suffused dark brown spot at the base and upper angle of the wing along the costa. Outer area of the wing suffused brown, a large white apical and a smaller, indistinct subapical spot. Below the apical spot another dark brown one; traces of indistinct dark brown and whitish, submarginal, zigzag lines. Cilia at the apex whitish, then pale brown with darker spots, and again at the inner margin whitish. Hind-wing fuscous, especially near outer margin, with an indistinct postmedial and submarginal band. A small, iridescent streak along the inner margin. Color of the cilia the same as on fore-wing but lighter. Below; fore-wing, suffused fuscous with traces of a postmedial and submarginal band; hind-wing with a dark spot at the end of the cell and the postmedial and submarginal bands more distinct as above.

&; collar more ochraceous, thorax with dark, grayish-brown hairs. Fore-wing; the brown basal spot not so dark as in the female, with a whitish marking inside of it and its outer edges continued with a suffused, dark brown, irregular, antemedial band. The white area very much suffused with traces of brownish spots. The white, apical and dark brown, subapical spots prominent.

Only the male of this species is new. Length of wing,  $\delta$ : 15 millimeters.

Length of wing, 9:15.5 millimeters.

Manila, P. I.

Time of capture: August, 1904. (Charles S. Banks and Rev. Robert Brown, S. J., collectors.)

Type  $\delta$ , No. 5711, in Entomological Collection, Bureau of Science, Manila, P. I.

REMEGIA, Guen. Noct. (1852), iii, 312.

Remigia intextilia sp. nov. (Pl. I, fig. 8.)

&, head, thorax and abdomen gray-brown, some dark speckles at the tegulæ. General color of the wings light gray-brown; fore-wing with 2 dark spots in the cell and a large prominent one at the end of it. Three very indistinct, dark, antemedial zigzag lines and a medial line from below the cell to the inner margin. A broad, irregular, slate-gray, post-medial band from the apex reaching the inner margin before the angle. An indistinct, white marking at the apex and a submarginal series of dark specks. Hind-wing with distinct, antemedial band nearly straight, suffused, indistinct, medial bands which are combined with the irregular, postmedial band. Some blackish specks at the medial line and a series of submarginal specks as on the fore-wing. The hair fringe at the

<sup>&</sup>lt;sup>6</sup> Hampson: Fauna of Br. Ind., Moths (1892), 2, 527, Sec. III (Remigia).

inner margin pale. On both wings a fine, pale, marginal line. Under side of the wings, the markings are more distinct; fore-wing with a black spot in the cell and one at the end of it. A distinct medial line and postmedial band. Hind-wing with a dark spot near the base, an antemedial, distinct medial and a postmedial, zigzag line. The area between medial and postmedial lines is darker, forming a band.

Length of wing,  $\delta$ : 24 millimeters.

Length of wing, ♀: unknown.

Manila, P. I.

Time of capture: December, 1905. (Charles S. Banks, collector.)

Type &, No. 4808, in Entomological Collection, Bureau of Science, Manila, P. I.

# CRUSISETA gen. nov.

&, palpi with the second joint thickened and reaching vertex of head, the third short and blunt; antennæ bipectinated, the pectinations short. Thorax clothed with long hairs. Abdomen slender, dorsally with hair tufts to fourth segment, then smoothly scaled and an anal tuft of moderate length. Fore and mid femur and tibia hairy, hind tibia and tarsi with very long tufts of hair. Mid and hind tibiæ with spines. Fore-wing; costa nearly straight, slightly curved towards apex; apex slightly angled, outer margin slightly curved, on the inner margin near the base a moderate tuft of erect hair scales. Hind-wing with apex slightly rounded, inner margin fringed with long hair.

Type: C. basipuncta.

In classification I place this new genus after the genus Crithote,<sup>7</sup> Wlk. Jour. Linn. Soc. (1864), 7, 182.

# Crusiseta basipuncta sp. nov. (Pl. I, fig. 9.)

Palpi dark brown; head, collar and anterior half of thorax dark brown, changing to fuscous on the metathorax. Abdomen fuscous. Legs, except the tarsi, dark brown. Fore-wing with a straight, antemedial, yellowish line, oblique from the inner margin near the base to subcosta. Base and area along the costa purple-gray. A distinct, dark brown spot near the base and upper angle of the wing. Outer area dark brown, growing lighter towards the outer margin, which is purplish-gray. The tuft of hair scales at the inner margin dark brown. Hind-wing fuscous.

Length of wing, 3: 16 millimeters.

Length of wing, ♀: unknown.

Manila, P. I.

Time of capture: August, 1905. (Charles S. Banks, collector.)

Type &, No. 3984, in Entomological Collection, Bureau of Science, Manila, P. I.

<sup>7</sup> Hampson: Fauna of Br. Ind., Moths (1894), 2, 541.

#### GEOMETRIDÆ.

#### BOARMINÆ.

MILIONIA, Wlk., Cat. (1854), 2, 364.

Milionia pretiosa sp. nov. (Pl. I, fig. 10.)

\$\partial\$, palpi and front, pale brown, shot with light blue, the sides of head whitish. Collar, thorax, abdomen and legs pale brown. A triangular, ochraceous spot at base of thorax; collar, tegulae, and coxae being especially shot with light blue. Fore-wing light ocherous, the apical half to lower angle of the wing, dark brown. An interrupted medial band from costa reaching the inner margin before the angle. At the base of wing an irregular spot, also dark brown. Hind-wing orange, a large, pale brown spot between costa and vein, which is covered by fore-wing. Another large dark brown spot between veins II and V; at the outer margin beginning on the upper angle a large, irregular spot; three round spots also along the outer margin at veins III, IV and V; the last one being the largest. There are some traces of pale, brownish spots along the veins next to the inner margin.

Length of wing, ♀: 25 millimeters.

Length of wing, d: unknown.

Manila, P. I.

Time of capture: July, 1905. (Alice and Fritz Worcester, collectors.)

Type  $\mathfrak{P}$ , No. 3591, in Entomological Collection, Bureau of Science, Manila, P. I.

# PYRALIDÆ.

#### Schoenobiinæ.

SCIRPOPHAGA, Treitschke, Schmetterl. Eur. (1832), 9, 1, 55.

#### Scirpophaga virginia sp. nov.

Head, thorax, rear edges of abdomen, anal tuft and wings snow-white. The under side of the fore-wings, in the male sex, except the cilia, is grayish, as are fore-legs, and in both sexes the mid tibiæ with gray spots.

Length of wing,  $\delta$ : 7.5 millimeters.

Length of wing, 9: 8.5 millimeters.

Manila, P. I.

Time of capture: September and October, 1905. (G. L. Araneta, collector.)

Type  $\mathcal{C}$ , No. 4466, and  $\mathcal{P}$ , No. 4351, in Entomological Collection, Bureau of Science, Manila, P. I.

This species is closely related to Scirpophaga gilviberbis Zell.

#### PYRALINÆ.

VITESSA, Moore, Lep., E. I. C. (1858), 299.

Vitessa splendida sp. nov. (Pl. I, fig. 11.)

\$\footnote{\pi}\$, head yellow, third joint of palpi gray; collar and tegulæ dark, metallic-gray, bordered by yellow. Thorax yellow, growing lighter towards metathorax; at the middle of thorax two confluent spots of which the posterior one is the smaller. Abdominal segments banded dark gray and white; anal tuft orange-yellow. Legs gray, fore-coxæ yellowish, middle coxæ and middle and hind femora white below. Hind tibiæ banded with white. Fore-wing dark, metallic-gray. A yellowish, basal, subtriangular spot with the basal edge excised circularly. The spot extending from costa nearly to posterior margin and having its outer side parallel with the bases of 2 white, subtriangular, antemedial spots, the lower of which is the larger. Two postmedial, white spots, one subtriangular and subcostal, the other trifid \$\frac{8}{2}\$ and subtriangular. The outer third of the wing longitudinally striated with a series of ten nearly parallel, whitish lines. Hind-wing white; outer half and a stripe along the costa dark, violet-gray. Cilia white.

Length of wing, ♀: 21 millimeters.

Length of wing,  $\delta$ : unknown.

Maao, Negros Occidental, P. I.

Time of capture: November, 1902. (Charles S. Banks, collector.)

Type  $\mathfrak{P}$ ; No. 4567, in Entomological Collection, Bureau of Science, Manila, P. I.

This species is nearly related to *Vitessa suradeva*, Moore, Lep., E. I. C. P. 299, Pl. VII, fig. 7.

#### PYRAUSTIN.E.

PYRAUSTA, Schrank, Fauna Boica (1812), 2, 163.

PYRAUSTA, Hampson: Fauna of Br. Ind., Moths, (1896), 4, 429.

#### Pyrausta vastatrix sp. nov. (Pl. I, fig. 12.)

\$\foatgap\$, palpi dark ochraceous, white below. Thorax and abdomen ochraceous, the last abdominal segments lighter. Fore-wing, ochraceous yellow with a reddish-ochraceous, excurved, antemedial, and a prominent post-medial zigzag line. A small speck in the cell and another at the discocellular, extending towards the postmedial line. The marginal and costal areas also reddish-ochraceous. Hind-wing pale, darker towards outer margin. A fine, brownish line at the outer margin. The fore-wing of the male somewhat darker, especially the area between the ante- and post-medial lines, suffused reddish ochraceous.

<sup>&</sup>lt;sup>8</sup> This is not well shown on the plate. The markings should be closer together.

Length of wing,  $\mathfrak{P}$ : 15.5 millimeters. Length of wing,  $\mathfrak{F}$ : 11.5 millimeters.

Manila, P. I.

Time of capture: March, 1904. (Charles S. Banks and W. Schultze, collectors.)

Type 3 and 2, No. 1365, in Entomological Collection, Bureau of Science, Manila, P. I.

This species is very abundant in the vicinity of Manila, the caterpillar living in corn.

# Pyrausta matuta sp. nov. (Pl. I, fig. 13.)

\$\foats,\$ palpi brown, white below; collar, thorax and abdomen yellowish, rear margin of abdominal segments whitish. General color of wings yellow. Fore-wing with a dark ochraceous antemedial, and a medial line, excurved in the middle and below the cell enlarged to a spot. Two postmedial lines of which the one next the outer margin is much excurved and runs together with the inner one at the inner margin. All these lines are very prominent. At the middle of the costa a small, brown streak. Hind-wing with a medial line, which is enlarged to a spot below the cell. Two postmedial lines, the inner one nearly parallel to the medial line; the outer one much excurved, meeting the inner one near the hind margin. Both wings with a strongly marked, brownish line at the base of ciliæ which are ochraceous. Wings below lighter. Fore femur and tibia light brown, first joint of tarsus light brown with the base and apex white. Mid femur light brown, all other parts, including hind legs, yellowish white.

Length of wing,  $\mathfrak{P}$ : 13.5 millimeters.

Length of wing,  $\delta$ : 10.5 millimeters.

Manila, P. I.

Time of capture: November, 1905. (P. G. Woolley and G. L. Araneta, collectors.)

Type ♂ and ♀, No. 4665, in Entomological Collection, Bureau of Science, Manila, P. I.

# TINEIDÆ.

#### HYPONOMENTINÆ.

#### Psecadia delicata sp. nov. (Pl. I, fig. 14.)

3, antenna gray with a black spot at the base. Head, thorax and metathorax very light gray; palpi, the third joint black banded. Two black spots on the collar, a small one at the anterior part of the tegulæ and five black spots on the thorax. Abdomen, dark gray below, and anal tuft lighter. Fore legs dark gray, the other lighter, middle tibiæ with a dark spot, mid and hind tarsi dark gray. Fore-wing light gray with

15 black spots, of which 3 are near the base; 2 next and parallel to the outer margin, the others being scattered irregularly over the discal area of the wing. Hind-wing darker gray, with the cilia lighter, especially on the inner margin. Under side of wings dark, smoky gray.

Length of wing,  $\delta$ : 8.5 millimeters.

Length of wing, ♀: unknown.

Manila, P. I.

Time of capture: August, 1905. (Charles S. Banks, collector.)

Type &, No. 4186, in Entomological Collection, Bureau of Science, Manila, P. I.

# ILLUSTRATIONS.

#### PLATE I.

- Fig. 1. Elymnias palmifolia Schultze 3.
- 2 a-d. Adixoa tomentosa Schultze 3,  $\mbox{\ensuremath{\bigcirc}}$  and cocoons with pupal skin.
  - 3. Euchromia elegantissima var. diffusihelvola Schultze  $\mathcal{Q}$ .
  - 4. Squamicapilla arenata Schultze 3.
  - 5. Pericallia integra Schultze ♀.
  - 6. Deilemera browni Schultze ♀.
  - 7. Ceryx maegregori Schultze Q.
  - 8. Remigia intextilia Schultze 3.
  - 9. Crusiseta basipuncta Schultze 3.

  - 10. Milionia pretiosa Schultze ♀.
  - 11. Vitessa splendida Schultze Q.
  - 12. Pyrausta vastatrix Schultze ♀.
  - 13. Pyrausta matuta Schultze ♀.
  - 14. Psecadia delicata Schultze 3.

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